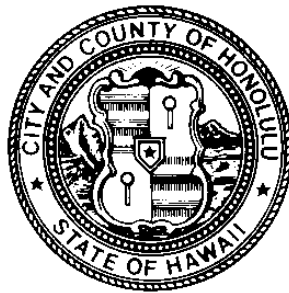


DRIVER TAILGATE LESSON PLAN

**Standards for Safe Backing
And
Hand Signals**



CITY AND COUNTY OF HONOLULU
DEPARTMENT OF HUMAN RESOURCES
Division of Industrial Safety and Workers' Compensation

STANDARDS FOR SAFE BACKING AND HAND SIGNALS

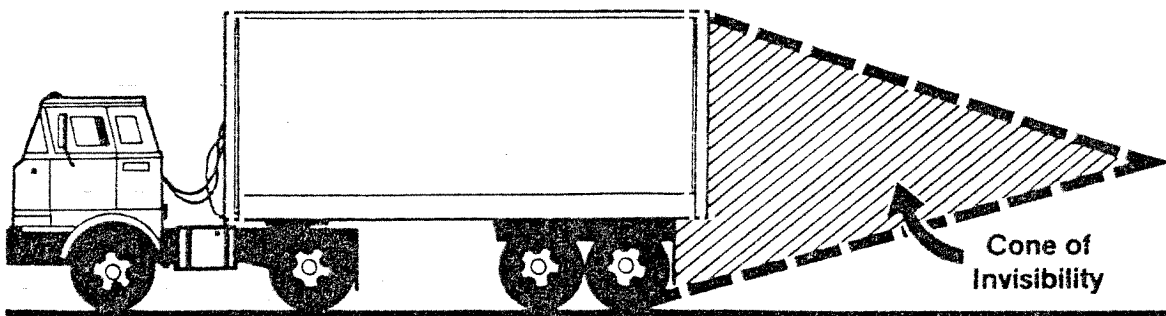
Most government and private agencies have established standard truck backing and hand signal procedures for their driving workforce. The main purpose for setting these standards is obvious: backing is extremely hazardous. Statistically, one out of every four or 25% of all accidents involving City vehicles are backing or backing related. When a driver backs the truck, there are four major areas of concern:

1. Visibility
2. Other Objects
3. Backing Skills (the drivers' ability to back the truck safely)
4. Terrain

Visibility

Cars and trucks are designed primarily for forward visibility, and therefore backing situations create visibility problems for the driver.

A heavy truck (over 10,000 GVW) has extremely limited visibility. A large area behind the truck is invisible even with rear view mirrors properly adjusted. This invisible area is called the "cone of invisibility." The larger the truck, the larger this cone of invisibility becomes. The picture below shows this cone of invisibility.



The driver must become familiar with the cone of invisibility so that precautions can be taken to avoid backing accidents.

Other Objects

There are two kinds of objects that can cause problems:

1. Stationary Objects. The driver sees these objects in the rear view mirror before backing. However, as the truck backs, the objects may suddenly disappear as the driver turns, or as these objects enter into the cone of invisibility.
2. Moving Objects. No matter how careful a driver may be by checking behind before backing, a moving object such as a child, car, animal, or crewmember can move into the cone of invisibility unnoticed by the driver. This is an extreme hazard.

Backing Skills

Backing is a special skill and the driver must develop this skill by practicing safe driving habits. The rear view mirror is the most important aid in backing; but, the mirror distorts heights, widths and distances. A skilled driver knows how to judge such distorted measurements accurately and adjust properly while backing.

Never back without thinking. Backing is a risky business and requires the full attention and skill of the driver. If a driver is unsure or does not know where crewmembers are or where objects are behind the truck, do not back. STOP! Get out of the cab and physically check the area. Crewmembers should be completely clear and to the side of the truck.

Terrain

The terrain in many areas may be uneven, wet, and soft. This increases the already difficult task of backing large, heavy trucks. Backing over soft or uneven ground can cause damage to the truck and property. It can also be dangerous.

SAFE BACKING TIPS

1. Stay alert and concentrate 100% of the time while backing any vehicle.
2. Always plan ahead to avoid backing situations whenever possible.
3. Walk around the vehicle to check the clearances and search for hidden obstacles **before** backing. (Be aware of objects that appear above, in back and to the sides of the truck.)
4. Stop the vehicle and physically check the area if in doubt of a safe clearance.
5. Assign a helper (if available) to guide and signal in backing situations. Always keep the signal person in view while backing to prevent hitting that person.
6. Honk your truck's horn 2 times (toot - toot) before backing. This signal will alert crewmembers to stay clear of your truck.
7. Stop the truck immediately if any crewmembers cannot be seen or their whereabouts are unknown.

8. Arrange cargo in the truck bed so that it does not block the view through the rear window, if possible.
9. Always keep your mirrors, rear window and windshield clean for good visibility.
10. Use both side mirrors when backing, glancing from one side to the other.
11. Exercise caution when backing a truck that has restricted rear visibility (i.e. rear lift gate, large load, etc.).
12. Always back slowly so that the truck can be stopped immediately, if necessary. Slow backing will minimize damage if a backing accident occurs.
13. Avoid backing in traffic and around corners.

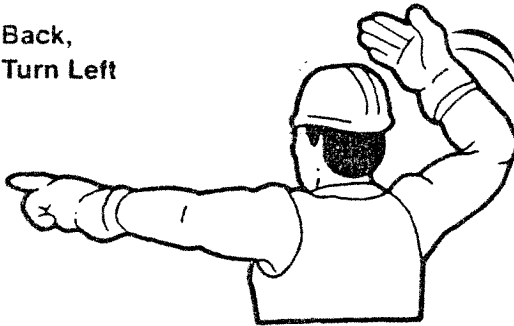
The following standards for backing and hand signals will be used and practiced by all City and County employees:

Standards for Safe Backing

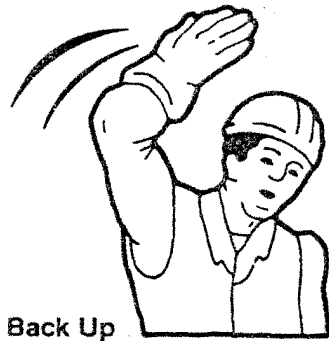
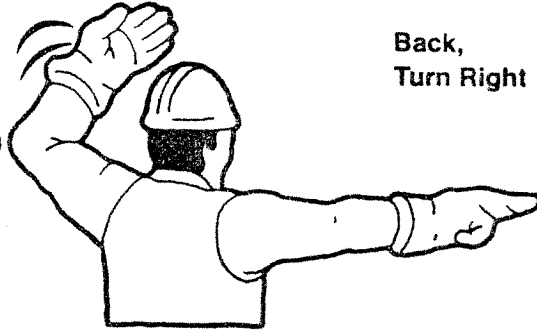
1. The driver has the final responsibility for safe backing. if the driver is not sure whether the area behind the truck is clear, the driver shall stop the truck and get out to check the area.
2. A fellow employee (if available) shall be designated as signal person to guide the driver back safely.
3. The signal person shall take a position to the rear and side of the truck to see that other workers and objects stay clear of the truck.
4. Always backup **slowly** so that the truck can stop immediately, if necessary.
5. If the driver is not sure if it is clear to back or cannot account for any of the crewmembers, the driver shall STOP the truck immediately. (Always keep the signal person in view while backing.)
6. The driver and signal person shall use the standard hand signals shown on the next page.

STANDARD HAND SIGNALS

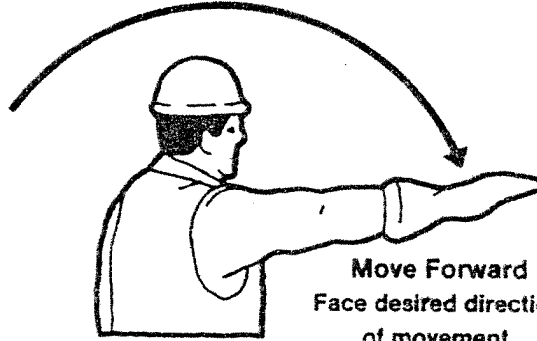
Back,
Turn Left



Back,
Turn Right



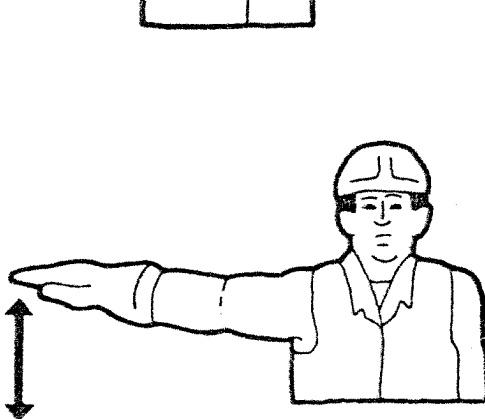
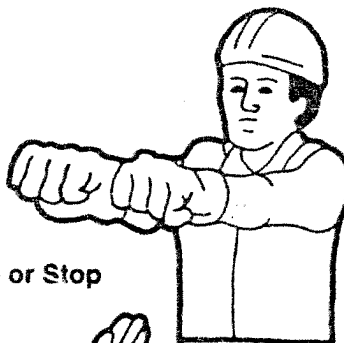
Back Up



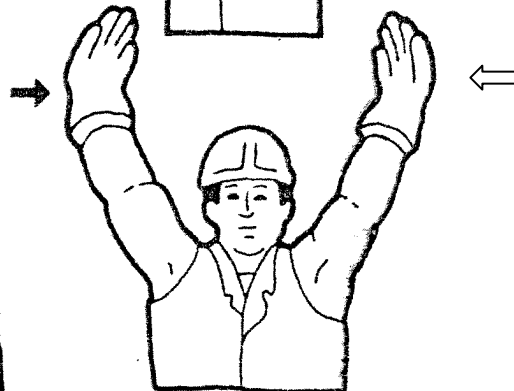
Move Forward
Face desired direction
of movement.



Stop or Stop



Slow Down
Move Arm up and Down



Distance
Left to Back